



COMPACT MODULAR RECLOSER (CMR)

Intelligent. Compact. Self-powered by Voltage

For greater flexibility, utilities can choose between pre-configured options as a drop-in alternative to a traditional hydraulic recloser or to self-configure the devices to take advantage of advanced protection, measurement and logging features.

Leading the way

Superior ratings up to 38 kV and unique self-powering via line voltage put the CMR at the forefront of the single-phase auto-recloser market. It presents a quantum leap in technology for cost effectively improving the reliability of overhead medium voltage networks. Featuring a fully insulated housing in a compact design, the lightweight device (<25 kg) permits easy installation and fast commissioning. An intuitive interface, wireless connectivity and SCADA integration capability ensure a high degree of user convenience and flexibility. The comprehensive rating options and practical design of the CMR enable unrestricted deployment onto both urban and rural networks. By eliminating the need for regular maintenance and utilising line voltage as power supply, this new generation of single-phase auto-recloser addresses all common problems of obsolete hydraulic reclosers.

Fully integrated self-powered system:

- Power supply using line voltage
- Rechargeable battery for back-up power
- Magnetic actuated vacuum interrupter
- Fully insulated design for improved operator safety
- Integrated protection relay and controller
- Flexible mounting options

Intelligent

- Wireless connectivity
- Simple and intuitive configuration tools
- GPS time reference
- SCADA capability (future)
- Voltage and current measurement

- Fault passage indication (FPI)
- Comprehensive event log
- Full range of TCC curves

Reliable and maintenance free

The auto-recloser is suitable for all sites, even those with inconsistent or no line current. Featuring fully configurable protection and four operations in a sequence, the unit is the ideal solution for sectioning faults on long rural distribution lines.

Unlike hydraulic reclosers, which need removal to be serviced and maintained regularly, the CMR switch unit has no need of periodic inspection and maintenance. It is designed to deliver a 25-year uninterrupted service life^(a).

Benefits

-  Elimination of oil filled reclosers
-  No scheduled maintenance^(a)
-  Fast & easy installation
-  Highly versatile
-  Flexible for the future
-  Fast ROI

SIEMENS

[siemens.com/compact-recloser](https://www.siemens.com/compact-recloser)

Compact Recloser Ratings

Type tested according to IEC 62271-111 / IEEE C37.60

Switch Unit Parameters	Unit	Rating	Rating
Rated voltage	kV	up to 27 kV	38
Rated frequency f_r	Hz	50/60	50/60
Rated continuous current I_r	A	630	630
Rated short-time withstand current I_k	kA	12.5	6.3
Rated peak-withstand current I_p	kA	32.5	16.4
Rated duration of short circuit t_k	s	3	3
Rated symmetrical interrupting current I_{sc}	kA	12.5	6.3
Rated symmetrical fault-making current	kA	12.5	6.3
Rated operating sequence		O – 0.3s – CO – 2s – CO – 2s – CO	O – 0.3s – CO – 2s – CO – 2s – CO
Opening/closing times	ms	<20 ms	<20 ms
Clearing time	ms	<50 ms	<50 ms
Rated line-charging interrupting current	A	5	5
Rated cable-charging interrupting current	A	25	40
Minimum number of operations at rated short-circuit current		70	240
Minimum number of load-break operations at rated current/mechanical operations		10,000	10,000
IP rating		67	67

Ratings Description	Unit	Model ^(b)				
Rated maximum voltage (P-P) U_r	kV	12	17.5	27	27	38
Rated power-frequency withstand – dry U_d	kV	28	50	60	60	70
Rated impulse-withstand voltage U_p	kV	95	110	125	150	170
Minimum system voltage for operation (P-P)	kV	7	10	15.5	15.5	20

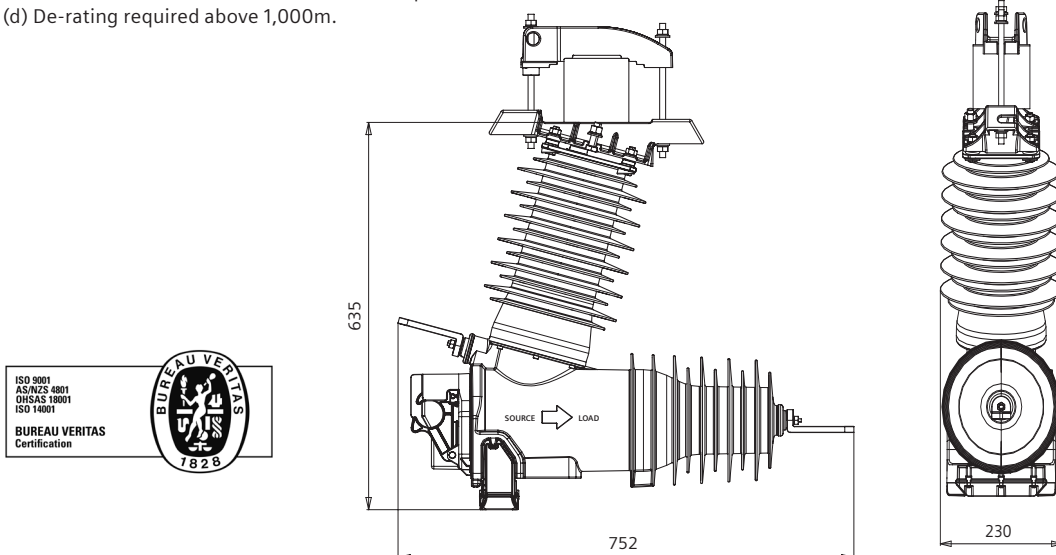
Service Environment	Rating
Operating temperature range	–40 ^(c) to +55°C
Humidity	0 to 100%
Maximum altitude	4,000m ^(d)
Pollution class	Very Heavy

(a) Excludes routine battery replacements every eight years.

(b) Correct model must be selected for the applicable system voltage (27kV model cannot be used on a 12kV network).

(c) Reclose intervals must be extended at temperatures below –35°C.

(d) De-rating required above 1,000m.



Dimensions are in millimetres